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BARANOWICE, A LANDED ESTATE IN POLISH SILESIA*

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The large landed estate is a prominent feature in several regions of Europe, and the presence of many of these properties in portions of eastern Germany and Poland has a significant effect upon the landscape of the Baltic plain. The landed estate contains many marked items of landscape, and the scene in a region wherein these properties cover a large percentage of the total area is quite in contrast to the scene in regions of peasant holdings. Extensive fields, large woodlands, well-constructed barns, a cluster of worker's homes, and the manor house itself all combine to form a pattern of land occupance that is easily distinguished from that of the small fields, cottages, and barns of the peasant farms. Baranowice, a landed property in Polish Silesia, is representative of this type of feature as it appears in many sections of the northern plain of Europe, from the northeastern portion of Germany thru Poland, East Prussia, and the Baltic states.

SITUATION OF BARANOWICE

The 2082 acre estate known as Baranowice, a name carried not only by the landed property, but by the village as well, is located at the southern edge of the great Silesian industrial district of Poland, nearly at the southwestern corner of the country (Fig. 1). It is near a region of coal and zinc mines, foundries, steel mills, and accompanying manufactural features. Yet the industrial activity, which centers around the city of Katowice, is not a visible landscape feature in the purely rural area at Baranowice. The landed property, however, belongs to the Giesche Company, one of the leading industrial concerns of the nearby region. Baranowice is in the section of Poland that previously belonged to Germany, and is within

* The writer wishes to acknowledge the aid of Mr. George Sage Brooks and Miss Hortense Brooks of Katowice, Poland, for data and photographs.

twenty-five miles of the former common meeting point of Germany, Austria-Hungary, and Russia. The setting of Baranowice is thus in the zone wherein western Europe meets agricultural eastern Europe, and the estate itself, like its neighbors, represents an inheritance from a past manorial Europe near a setting of the present-day industrial and commercial portion of the continent.

Site of Baranowice

The focal point of the estate is the group of buildings which form its core, and from which stretch the fields, pastures, forests, and carp ponds which comprise the lands included within the property boundaries. A rolling plain, set in the humid continental short summer climate at the headwaters of both the Oder and Vistula rivers, and some 900 feet above sea level, is the land surface upon which the cultural features of the estate have been superimposed. The specific site upon this plain that is occupied by the manor house, or "schloss" as it is locally called, is on a slight rise that is a short distance removed from the main road and railroad that pass along one side of the property. The fields of part of the estate, and the small bodies of water at the manor house itself drain northward over this plain to the Oder by way of the Ruda, which practically rises upon the estate, while the forest land, which is some distance removed from the building cluster, drains to the Vistula by way of a small creek.

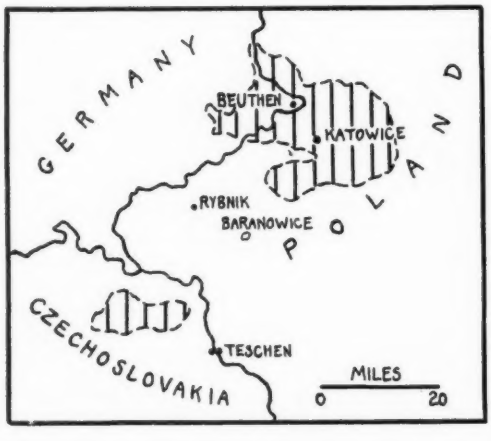

Fig. 1. The situation of Baranowice. The chief industrial districts are shaded

Buildings at Baranowice

A short entry road, which passes a carp pond at the entrance to Baranowice, permits of access to the buildings. These latter are placed in two groupings, separated from one another by a wall, thru which there are several gates (Fig. 2). At one side is the manor house itself, a substantial stone building set at the edge of a park of

about twenty acres (Fig. 3). At the other side, screened from view of the house by the wall, are the clusters of barns, sheds, machine sheds, and peasant dwellings, all of which constitute the central point for the agricultural operations.

The manor house far surpasses the other rural houses of the estate both in permanency of materials and method of construction. A graveled road, carefully raked, leads from the entry gate to the

FIG. 2. The entrance to the Baranowice farmyard

front doorstep, where the alighting traveller is protected from rain by a glass canopy that is attached to the building. The park with its raked gravel roads, benches, statuary, bridle paths, closely clipped grass, and 300 year old giant oaks, lies to one side of the manor, and functions as a place of recreation and retirement for its inhabitants.

The central focal point of the barns and peasant dwellings is a hollow-square courtyard, ample in size for the storage of a dozen or more wagons and other farm vehicles (Fig. 4). Around all four sides of the square are white two-story buildings which are the barns, and in part the residences of the estate. Certain segments of these buildings are devoted to cattle, horses, hogs, and other livestock, while other segments are divided into living quarters, oc-

cupied by workers upon the property. Rising above this low building group is a high brick chimney, perched on top of which is the inevitable stork's nest, a landmark for some distance upon the estate, and an omen of importance to the local peasantry.

Several isolated and scattered peasant cottages, belonging to the estate, stand a short distance from the courtyard and along the road or near one of the ponds. These are living quarters owned by

Fig. 3. The house and park

Baranowice, and occupied by the deputatists on the property—workers whose pay is received in kind rather than in cash.[1] There are eighteen deputatists engaged by the estate, and a total of thirty-six living quarters in the cottages and farm-yard barns, so some of the laborers who work for cash are permitted to rent estate living quarters not occupied by the deputatists.

The deputatist engages to work for a minimum of fifteen months, and to provide a woman co-worker to aid him in the agricultural operations. He is entitled to free living quarters, to a plot of a little more than a half acre on which he plants potatoes which are cultivated for him by the farm, to the use of estate vehicles for certain specified functions such as weddings and baptisms, and to pay

[1] German—Das Deputat.

in kind. This consists per quarter in advance of 1650 pounds of coal, 3 feet of fire wood, 605 pounds of rye for use in his bread, 114 pounds of barley for feed for the pigs and chickens that belong to him rather than to Baranowice, 81 pounds of wheat, and 1650 pounds of potatoes. In addition each deputatist receives a small net cash income per month (about $4.00), which is net pay after invalid and sick insurance have been subtracted.

Fig. 4. A corner of the farmyard

Land Use at Baranowice

Baranowice's 2082 acres are utilized in three different ways—as crop land, meadow and pasture land, and for forests. Five hundred seven acres of arable land, comprising about one quarter of the total acreage, are devoted to eight different crops. Ten per cent of the acreage of Baranowice, 217 acres, is utilized for meadow and pasture, and is grazed upon during the summer season by some of the livestock of the property. The remaining 1358 acres, more than two and one eighth square miles of territory, and two thirds of the total land area of the estate, is a forest land. Thus this large property, below the Polish national average in crop land percentage, far exceeds the average in forest land. The fellow estates likewise tend to depart from averages in similar respects, and thus to provide

significant local landscapes that differ from those in regions of peasant land occupance.

THE CROP LAND

The large fields of Baranowice are devoted to eight crops, usually grown as part of a five year rotation. These, in order of acreage, are rye, oats, potatoes, barley, wheat, red clover, feed mixture, and feed beets. Consequently the estate, with its emphasis upon rye and potatoes, and associated grain and hay crops, is a sample of many others upon the cool Baltic Plain of northern Europe, part of the large Rye-Potato Agricultural Region of the continent.

Rye is grown on 117 acres, or 23 per cent of the cropped land, while oats are raised on 78 acres, over 15 per cent of the arable land, and 70 acres of potatoes occupy nearly 14 per cent of the cultivated acreage. Together these three crops thus occupy slightly more than half of the crop land, and as such have a significant place in the cultural landscape of the area. The remaining crops, whose individual acreages range from a minimum of 25 acres in the case of feed beets to a maximum of 65 in the case of barley, collectively occupy the rest of the cultivated land, and furnish both feed crops for use upon the estate, and cash crops for sale in neighboring markets.

The grain crops—rye, barley, wheat, oats, and a feed mixture—are used upon the property in part. After the pay in kind has been computed, and the grain destined for seed, livestock feed, and family consumption has been set aside, the remainder is available for sale. In particular a number of breweries in neighboring districts of Silesia offer a ready market for the barley. Rye, the staple bread grain of Poland, is sold in the industrial regions.

The feeds used upon Baranowice are derived from both the grain crops and from specially grown feed crops, such as the feed beets. These, in conjunction with the hay crops, the potato, and the feed mixtures, are fed to livestock upon the estate, and take the place of corn in the American farm economy.

The crops are cared for by the agricultural workers, employed under supervision of an estate manager and his two assistants. The farm inspector supervises all the work, manages the crop sales, and plans the rotation, which for an individual field is normally potatoes or beets the first year, barley or oats the second, rye the third, red clover the fourth, and wheat the fifth. The clover is seeded with the

rye, which thus serves both as a grain crop and a cover crop. In August Baranowice gives employment to 78 people, 31 men and 47 women, as farm laborers. Forty-one of the women are field workers, while six are engaged as milk maids. Seasonal factors are responsible for a decrease in employment in winter, when ordinarily but 29 men and 30 women are on the payroll, and only for a seven hour day as against the 11½ hour day of the summer season.

The humid continental short summer climate of Silesia is responsible for an agricultural calendar upon Baranowice that bears considerable resemblance to that of portions of the northern United States, such as Wisconsin. In April the spring grains—barley and oats—are sown. Potatoes and beets are planted toward the end of the month and into May, at which time the spring sowing is completed. In June the first hay is cut. Late July and early August is the harvest season for grains, the winter rye and wheat harvest commencing about the middle of July. It is followed by the barley and oats harvest. In mid-August the last of the grains have been cut, the second hay crop is gathered, and fall plowing has commenced. By the end of September the winter wheat and winter rye has been sown. This operation is finished by the first of October, when the potatoes and beets are ready for harvest, and the silo must be filled (Fig. 5). Plowing for the seeding of the following spring then continues until frost, when the winter barn work, such as threshing, is pursued. During the winter season the activity in Baranowice, except in the forest, thus centers around the hollow-square courtyard, and the fields bear a continuous cover of moderately deep snow.

Fig. 5. The silo

Livestock Upon Baranowice

Cattle, horses, swine, and poultry constitute the chief forms of livestock at Baranowice. These belong to the estate, and are housed in the barns that surround the square farm yard. In addition small

numbers of poultry, principally chickens and geese, belong to the deputatists, and are kept near their dwellings where such are isolated from the main farmyard. The head herdsman has charge of the dairy livestock, and of the women whose duties are those of milkmaids.

Dairy cattle are of East Frisian stock, the black and white dairy cattle native to the low marshy shores of the Netherlands and northwestern Germany. The estate herd averages 65 milk cows, 3 bulls, and 48 calves, a large herd in numbers when grazing on the meadow and pasture land, but not large in proportion to the cropped acreage or total land area. In 1935 the milk produced by the herd totalled 61,125 gallons, 49,500 gallons or 81 per cent of which was sold, and the remainder of which was used at Baranowice for food for calves, or was given for pay in kind to the deputatists, each of whom receives two quarts a day as part of his recompense.

Twenty-seven working horses, used for the yearly operations upon the estate, are housed in a section of the barns that is separate from the cattle segments.

The Fish Resources

Carp ponds are common landscape features in Silesia. The carp is native to the streams of the region and is raised upon the landholdings as a fish crop. Baranowice, with three carp ponds, is thus representative also in this markedly regional industry. The estate itself is presumed to have been founded as a landed property by the Bishops of Krakow previous to the eighteenth century, and was extensively used for carp ponds by its owners. Series of dykes were built, these barriers flooding the natural forest meadows, and furnishing ponds wherein the fish were raised. The industry was continued by the French Huguenot family which purchased the property in the early 1700's and continued to own it until 1919.

The ponds may or may not be well cleaned of aquatic vegetation, for the carp is able to exist under environmental conditions that are difficult for other fish. The carp ponds at the estate entrance, however, are carefully tended, since they serve the double function of an entry landscape and of fish-raising. Each year 300 small fish are added for every ten acres of pond. The fish are fed from the beginning of May until the middle of September on blue lupine seeds. In the fall the ponds are drained, and yield about five and a half tons of fish for the Christmas season market. The pond output is thus a

"crop" or "product" that has been tended during its period of growth, and has been harvested in preparation for a definite market.

Forest Land of Baranowice

A forest land of 1358 acres occupies a nearly continuous block of land that is farthest removed from the site of the manor house, and is well back from the main highway and railroad. In type, the

Fig. 6. The mixed woodland at Baranowice in winter

forest is representative of north European plain woodlands, for it is of mixed coniferous and hardwood growth, but dominantly of the former. Red pine and spruce are the chief trees, but admixtures of birch, beech, and oak are important (Fig. 6).

The forest of Baranowice is divided into rectangular blocks by fire lanes and fire ditches. The pattern produced in the woodland as a result of these cultural imprints of man is marked, especially so from the air. A forester and his two assistants, employed by the estate, supervise the care of the woodland and are in charge of all logging operations and fire patrol work, as well as of reforestation. A plan for the latter must be submitted to the Polish government

before any timber is cut, and in general logging is limited to mature trees of fifty years of age. Actual cutting is carried on by a crew of woodchoppers, and extraction of the logs from the woods is facilitated by equipment such as railroad spur tracks built to the area from the adjacent main line.

The forest cover of Baranowice also functions in game management. Several species of wild game, native to the woodlands of

Fig. 7. At the house after a hunt

Silesia, have been preserved in part thru the adequate cover of the landed property forest and in part thru rigid methods of protection and closely controlled hunting. Hunting is in general open only to land owner and guests, and is rather commonly barred to the peasantry. In addition the pattern of grain field, pasture, meadow, and large woodland in juxtaposition furnishes cover and food to a variety of animals and upland game birds that thrive in this combination of landscapes, while ducks are annually attracted to the marshlands and carp ponds during their migrations. Among the different species of wild animal and bird life of Baranowice are the elk, deer, wild swine, fox, badger, Belgian hare, cottontail rabbit, pheasant, mallard duck, partridge, and snipe (Fig. 7).

The forest land on Baranowice, as on other estates, thus is a critical element of landscape, is itself divided into definite patterns,

and shelters several forms of native animal life which are features of the regional complex.

Summary

The landed estate (gut, dwor) is a significant item of landscape upon the plain of north Europe in eastern Germany and Poland. Definite cultural forms in well defined patterns of association generally result from this type of land occupance, and give character to the landscape of the region. Baranowice, a landed estate of 2082 acres in Polish Silesia, is representative in many respects of this particular type of unit and as such may be taken as one of the features which in association with other estates and with peasant farms help to form the geographic complex of this portion of the Baltic plain of Europe.

UNUSUAL WEATHER VISITS SOUTHERN CALIFORNIA

Willis H. Miller
California State Planning Board

Old Man Winter brought a bountiful supply of "unusual" weather with him when he visited Southern California this year. Sleet at the beach, ice in orange groves, and raging blizzards in the mountains will make the year 1936-37 a legend in sunkist land. During December there was far more than the normal precipitation and in January temperatures were lower than at any time for the past fifteen years. From the geographical point of view it is significant to observe how a drop in temperature from a few degrees above freezing to a few degrees below freezing has altered the normal course of events in Southern California. The weather changes measured in inches and degrees have been small, but the effect of these changes on human activity has been surprising.

Meteorological Conditions

The southward shift of the wind belts brings California under the edge of the Westerlies and their cyclones and anti-cyclones during winter months. At that season more or less rain can be expected, as well as occasional thermometer readings in the low forties and thirties. Late in 1936, however, a series of cyclones cen-

tering at a remarkably low latitude moved over Southern California bringing copious rain to the coastal lowlands and uncommonly abundant snow to the higher mountain regions (Fig. 1).

Soon after the first of the year a semi-permanent high pressure area settled down over the Great Basin. At the same time temperatures in Salt Lake City, for example, dropped to as low as

Fig. 1. Lake Arrowhead, popular San Bernardino Mountain resort, after a heavy snow storm. During the winter of 1936-1937 all Southern California mountain areas reported far more than the average amount of snow. Courtesy, Lake Arrowhead Hotel Company.

16° below zero. Under ordinary circumstances the coastal plain and interior valleys of Southern California are protected from continental winds by the great Sierra Nevada and San Gabriel-San Bernardino Mountain barriers. Cold air crossing these mighty ranges is forced to descend from five to ten thousand feet before it can reach valley settlements; in this way the invading air is adiabatically heated enough to make it relatively harmless. This winter, however, the northern air pushed down by the continental anticyclone was so cold to begin with that, despite the adiabatic heating, the Los Angeles area became thoroly chilled. Such a con-

dition would have been quite bad enough had it lasted only a day or two but, as tho knowing the California urge to have things bigger and better, it continued for about three weeks.

Hazard to Citrus Groves

Probably the most serious effects of the cold wave were experienced in citrus groves planted on the upper parts of piedmont alluvial plains. Year after year air drainage has left thousands of acres of oranges and lemons safe in the thermal belt of the upper piedmont, but in 1937 there was so much cold air in Southern California that it filled the valleys as tho they were giant bathtubs. Current estimates indicate that from 25 to 50 per cent of the $100,000,000 citrus crop has been lost, and that in some places trees have been damaged. Fortunately sap was well out of the trees, so damage in that quarter probably is less than might be expected.

Fig. 2. A citrus rancher inspects the crop on his mature orange trees. This warmly dressed man is wearing high boots for protection against the damp cover-crop raised to add desirable humus to the light piedmont alluvial soils. In his left hand is a special torch used for lighting smudge pots. The orchard heater in the foreground is of modern design with a large reservoir for oil, a tall stack, and a hinged cap to smother the fire when no more heat is required. Courtesy, Los Angeles *Herald and Express*.

Altho the recent freeze is no more serious than those of 1913 and 1922, it is of more interest because this one tested the efficacy of two modern developments—frost warnings and smudge pots. For about a decade frost warnings have been issued every night dur-

ing the winter by Dr. Floyd Young, special representative of the Weather Bureau stationed at Pomona. Detailed reports from all over the citrus region pour into Pomona so that Dr. Young can make estimates concerning the probable minimum temperatures in every important orange and lemon producing district. These estimates are broadcast at eight o'clock by Hollywood radio station KNX. On doubtful nights most citrus men stay close to a radio, but moving picture theaters commonly flash on their screens the report for their local district. If temperatures below 30° are indicated there is a shuffle and murmur all over the house as whole families

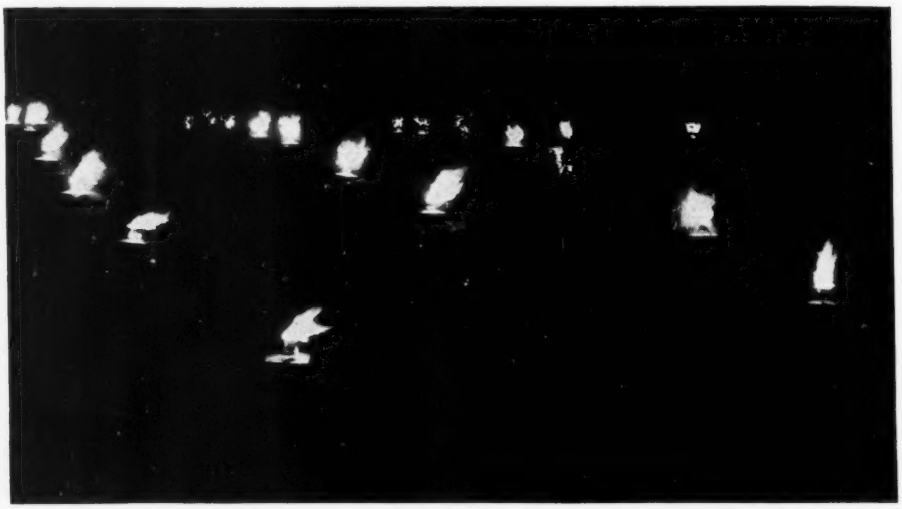

Fig. 3. A battery of smudge pots burning in a young orange grove. Obviously orchard heating on such a scale requires the use of large quantities of fuel per acre. Courtesy, Los Angeles *Herald and Express*.

hurry home to tend their smudge pots (Fig. 2). This invaluable frostcasting service is supplemented by privately employed riders who cruise up and down checking thermometers strategically placed in the groves themselves.

Several factors account for the localization of this important Weather Bureau office in Pomona. Located close to the center of the Los Angeles Basin, Pomona is well placed to serve as a clearing house for information collected from a wide area. Because of Pomona's average position in the citrus belt local weather conditions commonly are fairly typical both of the coastal and the interior orange producing districts. Then, too, Pomona is headquarters of the old and influential San Antonio Fruit Exchange, one of

the strongest advocates for the establishment of a special frost prediction service.

Smudge pots—often called orchard heaters—burning either oil or petroleum coke can raise the temperature of a grove from 4° to 12°, depending on local conditions. After the disaster of 1922 all but foolish optimists equipped their groves with efficient orchard heaters, usually one for every two trees (Fig. 3). This year some 5,000,000 smudge pots were ready for action in the Southern California citrus belt. During the 18 nights of January when smudging was necessary more than 200,000,000 gallons of oil and an unknown quantity of coke were burned by citrus growers. Fruit Exchange estimates show that in the coldest weather, when grove thermometers hovered around 20°, citrus men burned as much as 700,000 barrels of oil worth $1,000,000 in a single night. This is about 50 per cent more than the daily allowable production of crude oil in California. Tending smudge pots on cold nights is dangerous as well as unpleasant. At least two men were killed when their oil soaked clothing caught fire, and dozens of burns were reported in all parts of the citrus region.

Even growers with a good supply of oil found themselves urgently needing more fuel. For days a steady stream of tank cars and loaded trucks poured from Los Angeles refineries into every nook and corner of the citrus belt. Frequent attempts were made to "highjack" trucks of oil by offering drivers a bonus to make an intentional mistake in delivering their precious cargo. Those ranchers using pots equipped for coke were in even greater distress because only a limited supply of that new fuel was available. The emergency led to some highly novel innovations. Hundreds of old automobile tires were cut up and burned in smudge pots, much to the discomfort of passing motorists who thought their brakes were on fire. In Ojai one desperate grower burned dozens of wax candles under his trees. Near Indio in the Coachella Valley a fortunate grapefruit rancher remembered that his artesian well water had a temperature of about 100°, so he filled his irrigation ditches to the brim thus providing circulating hot water to each tree. Fans, blowers, and other freak methods of frost control definitely were proved ineffective.

Dense clouds of greasy, black smoke not only filled the citrus belt but, with the help of offshore winds, managed to blanket Los Angeles and even the beach cities (Fig. 4). Reports from aviators indicate that this artificial cloud reached a maximum depth of

about 5,000 feet. There is reason to believe that smokeless heaters, altho more expensive to install, would be just as efficient in saving fruit and trees. Dr. R. M. Langer, physicist at the California Insti-

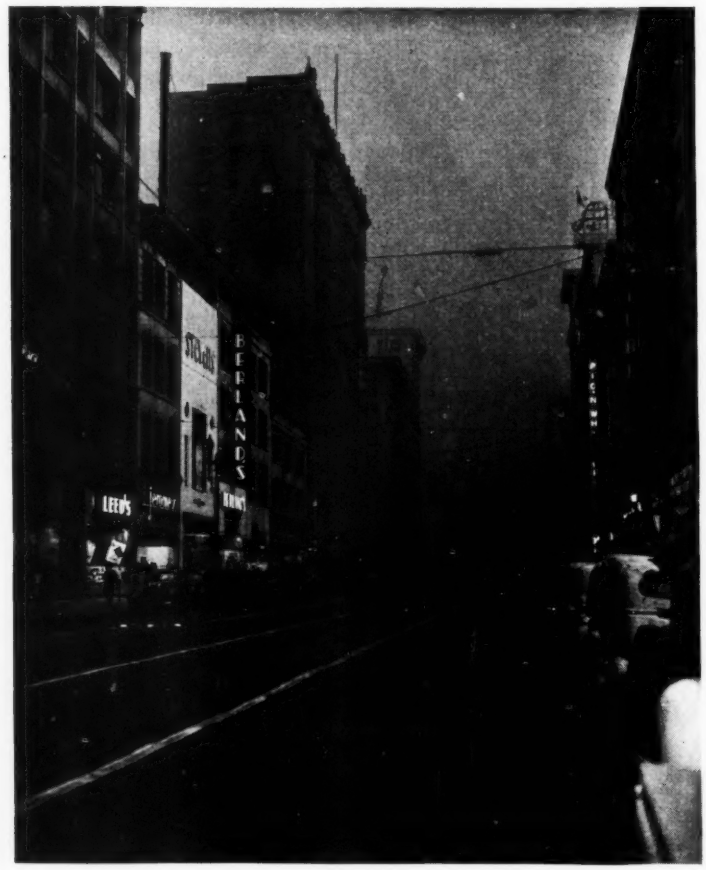

Fig. 4. Looking north on Broadway in downtown Los Angeles. This picture was taken at midday when a pall of smudge was sweeping in from the citrus belt. Attention is directed to the light traffic, the few people on the sidewalk, and to the lighted electric signs and show windows. Courtesy, Los Angeles *Herald and Express.*

tute of Technology, recently suggested that smudge probably prolongs cold spells by preventing the sun from warming the earth during the day. All citizens not directly associated with the citrus industry vigorously resent the seemingly unnecessary invasion of smudge. Los Angeles County Supervisor Legg was so irritated that he proposed to Senator McAdoo that the R.F.C. authorize a subsidiary to make available $15,000,000 for the purchase of smoke-

less heaters. Unquestionably something will have to be done about this invidious smudge.

Other Farm Problems

Other farmers and ranchers in Southern California also suffered ill effects from the cold snap. Avacados, a very delicate fruit, only lately have become an important California crop. This winter avacado trees planted in spots considered even more frost-free than most of the citrus belt were damaged because of an almost complete lack of orchard heating equipment. Fortunately 27 per cent of the crop had been harvested, but about 70 per cent of the remaining 9,000,000 pounds were lost. Tomato growers managed to avoid much damage by covering the young plants with straw. Spinach, celery, cabbage, cauliflower, and rhubarb producers, however, suffered losses of from 12 to 40 per cent. Poultrymen in Pomona report a 20 per cent reduction in egg production; because of darkness caused by smudge the hens think it is night and spend most of their time roosting.

Health and General Effects

The combination of cold and smudge have resulted in a wide variety of general effects on people in all walks of life. According to Dr. Pomeroy, Health Officer, there have been more than 100,000 cases of influenza in Los Angeles County during the month of January. Santa Ana and Pomona schools were closed as a precautionary health measure. At the Riverside County Hospital only emergency operations were permitted because the great quantities of soot and smoke in the air increase an already considerable pneumonia hazard. Thruout Southern California the combination of cold and smudge has been highly unfavorable for persons suffering from respiratory ailments.

Householders have had their problems too. California architecture has real charm, but the construction of ordinary houses is not conducive to comfort during freezing weather. Within the past decade gas furnaces largely have replaced inadequate floor heaters and stoves, but even the new furnaces are not enough to compensate for thin walls and countless drafts. On the colder days local resources of natural gas were not sufficient to supply the peak demand for heat, so an old petroleum gas plant, unused for nearly a decade, was hurriedly pressed into service. Darkness caused by smudge made it necessary to use electric lights extra late in the

morning and extra early in the afternoon. All over Southern California, but more especially in the citrus belt, people found that paint, curtains, drapes, clothing, pets, and hair all suffered grievously from day after day contact with oily smudge. Despite the need for clean clothes laundry was almost impossible. A line of snowy linen hung out to dry soon looked like a collection of second

Fig. 5. Deep snow and winter sports at Lake Arrowhead in the San Bernardino Mountains. Notice that snow reaches half way to the eves of the cabin in the background. Such heavy snowfall insures ample irrigation water for valley farmers, but prevents thousands of vacationists from visiting the many mountain winter resorts near Los Angeles. Courtesy Lake Arrowhead Hotel Company.

hand coal sacks. In Hollywood and other centers remote from actual smudging practically all bananas, poinsettias, and delicate shrubs were killed by frost.

Merchandising always bears a close relation to weather conditions. As a result of cold, influenza danger, occasional ice on side-

walks, and an unusual traffic hazard caused by clouds of smudge there have been far fewer than the ordinary number of shoppers attending January sales. In certain lines, however, business has been greatly stimulated. Gas and electric heaters, blankets, comforts, gloves, and overcoats have sold like hot cakes. Several stores even have run large advertisements recommending good old fashioned woolen underwear.

Resort Industries

Injury to Southern California's great resort and tourist industry, while impossible to estimate, surely must have been considerable. Weather usually is pleasant, but this region definitely is subtropical, not tropical. Fur coats sometimes are worn by women for comfort as well as style, and the broad blue Pacific is no place for the ordinary mortal to swim during the colder half of the year. This season an unpleasant combination of cold, rain, and smudge has been a source of disappointment to many tourists. Even famous winter resorts at Lake Arrowhead, Big Bear, and elsewhere in the adjacent mountains have not fared so well (Fig. 5). Snow, eight feet deep on the level, in the San Bernardino Mountains blocked roads for days at a time, and has caused several cabins to collapse—sometimes on the occupants. Hundreds of vacationists, including several members of the writer's geography classes, were snowbound at isolated mountain camps without sufficient food or medical supplies.

Conclusion

Impartial study shows that California's unusual weather really is unusual. The truth of this statement is demonstrated by the flurry of excitement caused by night temperatures slightly below freezing experienced in certain areas for less than three weeks. Not more than two or three times in a generation does it get cold enough to seriously injure crops, and only once in the history of the Los Angeles Weather Bureau office has there been snow on the city streets. There is ample justification for the boundless pride which Californians, both old and new, have in their State and its climate. Plans were made for a bigger and better National Orange Show to be held as usual in San Bernardino. Marketing organizations point out that while the tonnage of citrus and certain other crops is curtailed, higher prices will help balance the books. One final significant fact should be kept in mind. Southern California

no longer depends on the citrus industry to the degree that it did in 1913 and 1922. Within the past decade and a half rapidly growing manufacturing, petroleum, and commercial activities have made this area one of unusual diversification and stability.

A STUDY OF A PERMANENT ALABAMA LUMBER TOWN

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Introduction

Lumbering was a pioneer industry in the South. Forests have been an important economic asset to Southerners for more than three hundred years, the first mill having been established in Virginia in 1722. It and other early mills were adaptions of the old European type mill which used the water wheel for power and a single sash-saw. North Carolina, South Carolina, and Georgia each in turn had their lumber mills to supply home demands and to prepare lumber for export.

Prior to 1870 approximately 85 per cent of the sawmill cut of our country was in the Northeastern states. Then began the rise of the South, and by 1910 it was the leading lumber producing section of the United States. Since then, however, production in the section has been steadily decreasing while it has been steadily increasing in the Northwest.

A question of great importance to Southern laborers, industrialists, and lumber consumers is whether lumbering and allied industries will disappear from the South. In an effort to answer this question for one enterprise a careful study of the Jackson Lumber Company, located at Lockhart, Alabama, was made by the author. He here presents the results of his study.

The Jackson Lumber Company

The Jackson Lumber Company was organized as a part of a Delaware Corporation in 1902. That same year a town site was plotted in south central Alabama near the Florida line on a 120,000 acre tract of land. The site of the town and plant is a level area,

well drained by two small streams. The residential sections are the highest portions of the site, and the lowland and small stream to the east of the site furnish a place for a log pond which is used in connection with the plant. The whole town reveals evidence of careful planning as is seen by the map, Fig. 1. The corporation directors from the first were, it seems, interested in the permanency of the company and the comfort of its employees. Such a policy has been maintained rather consistently thruout the history of the company.

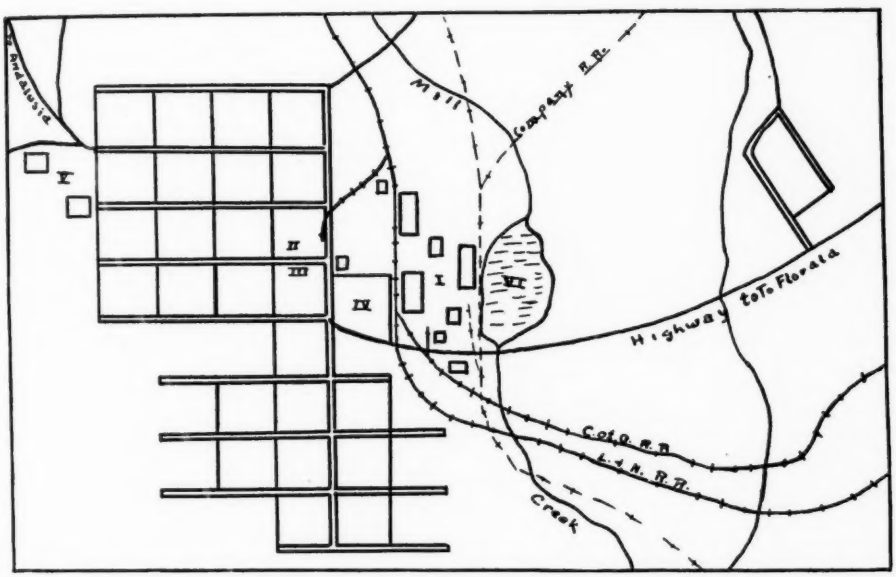

Fig. 1. A sketch map of Lockhart, Alabama, a town founded, owned, and managed by the Jackson Lumber Company. The numbers designate the following places: I. the plant; II. business houses; III. offices of the company; IV. park; V. schools; VI. mill pond.

Lockhart

Lockhart, the name chosen for the town, is a typically modern town with electric lights, city water, paved streets, and ample recreation facilities. It is served by two railroads, has good highway connections with inland and seacoast towns, and is surrounded by excellent farm land. All dwellings and business houses in the town are owned by the company. The stores are among the most modern to be found in southern Alabama. The general appearance of the town indicates progressive and efficient management. Just

recently a large sum of money has been spent for repairs on and remodeling of the company-owned houses.

Living conditions in Lockhart are more favorable on the whole than are found now in other mill-towns of the South. The houses are well built, provided with modern conveniences, and rent for a very reasonable sum which ranges from $4.50 to $23.00 a month. A garden plot and water are included for this amount. A club house, a recreation hall, and a park have been provided by the company in order that the leisure time of the employees may be used profitably. Religious activities are left to the initiative of the various denominations but the fullest coöperation is given to any religious program.

There is a very harmonious relationship between the races in the town. The Negroes who make up about 30 per cent of the population are segregated into a separate section. They have their own religious and social life in the manner that they see fit. Their section of the town differs little, in the way it is planned, from the white residential district. Salaries are paid to laborers with no discrimination as to color.

The social status of the families living in the white residential district of Lockhart compares favorably with that of any other town of its size, as is seen by the following statistics, which have been collected by the author.

	Per cent
Homes with bath	40
Homes with electric lights	45
Families with an auto	60
Families with a daily paper	37
Families with a weekly paper	36
Families with a radio	43
Families with a magazine	19
Families with a telephone	5
Average number of books per home	20
Average size of family	5.1

The educational status of the inhabitants of Lockhart is rather low because of the fact that relatively few skilled workers are needed and, too, the families need the additional income that a high school student can earn. The garment factories in the near-by town of Florala attract many of the girls before graduation and the lumber plant at Lockhart attracts many of the boys. The situation is reflected by the facts that only 40 per cent of the pupils who

finish the Lockhart junior high school ever graduate from senior high school and not one has ever completed four years in college. The company, nevertheless, supports whole heartedly the county educational program and particularly the big twenty-teacher elementary and junior high school system in the town.

It is, therefore, easy to conclude from the above description that Lockhart is an ideal industrial community in that it is more or less permanent, has a relatively high standard of living, healthful living conditions, and a contented group of employees. The fact that 60 per cent of the employees have been with the company for twelve or more years is evidence that the workers are well treated.

Policies of the Company

The operation of this plant which has a capacity of 75,000 board feet per ten-hour day, has been responsible for over $30,000,000 being put into circulation in the immediate territory since 1902. This is an average of approximately one million dollars a year. At present the company is paying almost a half million dollars a year to its employees in wages. The common laborer is paid twenty-five cents an hour unless he is working under contract. Return from contract labor is not essentially different from that of the day-laborer, tho the amount of work done is greater. The store and office force, excluding the general manager, receive salaries ranging from $48.00 to $350.00 a month. Such a schedule compares favorably with that of any lumber mill in the South.

Further economic security is assured the employees by an industrial insurance which the company carries on all the employees. The policy pays an employee about 50 per cent of his regular salary if he loses time on account of illness or injury. For more serious injuries such as the loss of a limb or an eye, it pays a cash sum that is equal to about one year's wages. Free medical service is rendered to all employees.

The depression was a serious blow to the lumber industry. In 1932 scores of employees were laid off temporarily and many permanently. A plan was devised whereby the unemployed might start farming on the company's land. According to this plan a person might operate a farm and receive all the benefits from it that he would if he owned the land, and also receive every reasonable benefit from the company. More than 4,000 acres of land are utilized in this manner at the present time. "We tried this plan as an experi-

ment," said the manager of the company, "and it has proved highly satisfactory. Our tenants are contented and generally successful. It is calculated to help them to become independent and thrifty, and at the same time it works to the advantage of the company. We have five applicants for each of the 110 farms available."

The average size of the farms is 38 acres. Each one has a good supply of wood and pasture space which varies from one-sixth to one-tenth of the entire farm. Included on each farm is a well con-

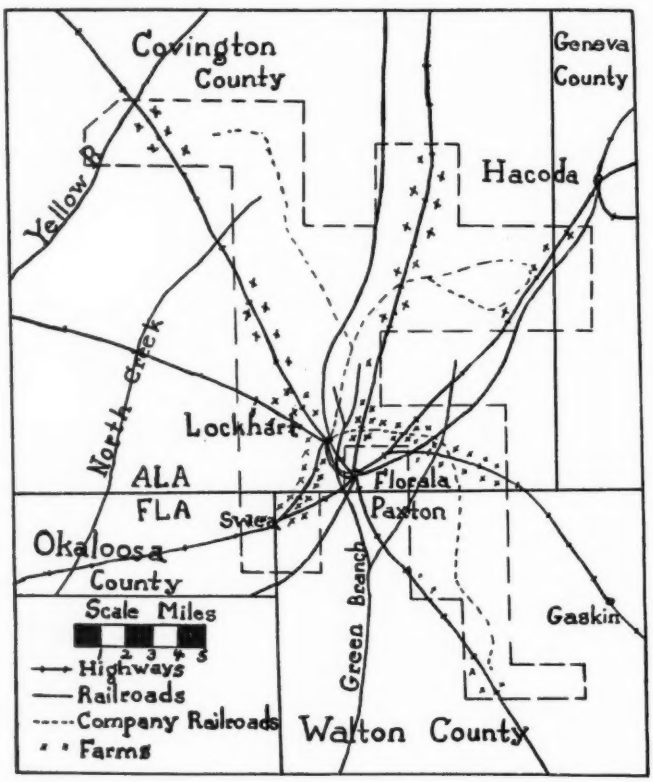

Fig. 2. Map showing the property of the Jackson Lumber Company and the surrounding territory. The Company lands are bordered by the broken line.

structed dwelling and a barn. The majority of the farms are conveniently located near the town of Lockhart (See Fig. 2).

SOURCE OF LUMBER

The Jackson Lumber Company has operated on the same site for thirty-four years, largely because it has practiced a program of conservation. If the program is strictly adhered to the plant will

operate indefinitely. Early in the history of the company a plan was devised and adopted which would allow an annual cut such as would theoretically prevent a depletion of the timber supply. The annual cut was to come from approximately five-sixths of the 120,000 acre tract of land. The remaining 20,000 acres are devoted to farms, pastures, and tung oil plantations. The greater part of the available cut at present is located at a distance of 20 to 35 miles from Lockhart. Much of this timber, that is not readily accessible to the company railroad, is now being cut into lumber by small mills and trucked to the planer where it is prepared for market. Relatively little of the land is difficult to reach.

The lumber being cut, at present, varies from the lowest grade of Southern pine to the highest grade of hardwoods and pine. The prices per thousand feet range from $14.50 for the poorest grade of pine to $36.00 for the best grade of hardwood.

Until recently a very low percentage of the lumber was sold locally. The local sales show a decided increase since 1934, due, it is believed, to a scarcity of small lumber dealers since the partial depletion of the timber supply. The large Southern cities and foreign countries have been the principal markets for the lumber. Huge orders are filled frequently for Italy. Mobile and Pensacola are the principal ports to which the lumber is shipped by rail to be exported.

The forest conservation program also provides for protection against fire, destruction of dead and broken limbs, protection of undergrowth, and the cutting of mature trees only. If fires are kept out of the forests, the natural regrowth of trees is very rapid. Frequently close stands of young trees are thinned, in order to allow the best growth. Fires are kept at a minimum; less than one per cent of the land is burned annually.

Conservation is also practiced at the sawmill. An extremely small part of the log is wasted. The band saws cut an eighth-inch kerf as compared with a five-sixteenth kerf of the circular saws commonly used at small mills. The thicker slabs, instead of being piled aside to rot or be burned, pass thru a series of saws which cut them into lath or moulding. The rougher or more uneven slabs are cut into short blocks and carried on a belt to the fuel room. This waste is sufficient fuel for the boilers and for the homes of the workers.

In addition to conserving its own forests the company officials cooperated with those of other companies in 1923 to get Alabama

to take some official action toward the conservation of the forests of the state. It is calculated that the resulting program adopted by the state saved many millions of feet of lumber from destruction and allowed millions more to be grown. There may now be cut in the state 12,000,000,000 feet B.M. annually and still maintain a balance between cut and growth.

The Jackson Lumber Company is, at present, obtaining approximately 35 per cent of its annual cut from private owners within a radius of 75 miles. Due to its contact with big markets, the company is able to pay a more attractive price for the small tracts of timber than are the smaller mill owners.

SUMMARY

The efficient management of the company, its program of forest conservation, and its policy of purchasing from private owners, insures it an indefinite period of operation. The facts that Lockhart has a fairly stable lumber industry assured, will probably be an important center of a tung oil industry, and a farming section, lead one to believe that the town will be permanent and one of the most prosperous in southern Alabama.

VILLAGE LIFE IN KOREA

ANNE C. KIM
Mount Holyoke College

VILLAGE STREET

Thinking back across my twelve years in the United States to my homeland, I am filled with poignant memories and an intense longing for that peaceful land of Korea. I imagine myself strolling down a narrow unpaved street in the village of my childhood. Behind their walls one-story houses are set close together on either side, giving an impression of neighborliness. Vendors, carrying their wares on racks placed on their backs, or on poles across their shoulders, chant their importunities to buy, as they too pass down the street. Here and there I can see a sedan chair, a jinricksha or boys on bicycles. Children, playing in the street in their bright-colored clothes, are shouting and laughing as joyously as the children in any other land. The little girls love to play at housekeeping just as do girls in America. The boys are also as boisterous and mischievous as American boys.

WOMEN

Women and young girls are walking demurely along, some of them carrying a younger brother or sister on their backs. Many have earthern jars of water drawn from the community wells, or hand-woven bamboo or willow baskets on their heads, containing the family laundry. The laundry is done in the little stream that flows down from the hills among which the little village is nestled. Each village has from one to several wells according to its size. It is easy to distinguish between matrons and maids because the latter always wear their hair in heavy braids, which may reach down to their knees. The girls' skirts and short blouses are of practically every hue in the rainbow. The matron, on the other hand, wears her hair up on her head, while her garb is of a more subdued color or often white, which is a universal color for both men and women, tho occasionally one sees a bolder youth appearing in dark western garb.

THE HOME

The woman usually does not appear on the streets except in the early dawn or at dusk, when there are fewer pedestrians. This is

due to the old, old custom of keeping her in seclusion, which modern times have not entirely abolished. Woman's place is in the home, and even in her own home, she remains in the rear part of the house if her father, brother or husband is entertaining guests in the outer guest-room. The house is of adobe, with a thatched roof if her family is poor, or one of tile if they are well-to-do. The floors are usually the bare earth, beaten until a hard surface is formed. This is then covered with rice-straw mats. The rooms are simply furnished, the most prized piece of furniture being the chest where clothing and linens are kept. Often the chest is beautifully inlaid with mother-of-pearl into intricate and artistic designs. On the papered walls may hang a painted or embroidered panel or two. There are no windows of glass, but instead the light enters thru latticed slides over which are stretched oiled paper.

The kitchen is a sort of a lean-to added to the main part of the house. Food is cooked over a fireplace in iron pots hung over the fire. There are many pots, big ones and little ones. The food is served in brass bowls in the winter and porcelain dishes in the summer. The woman's pride is her collection of brass dishes and utensils. She delights in keeping them bright and shining. The food is eaten on low individual tables of wood, and since there are no chairs, one must sit cross-legged on the floor. Brass or silver spoons with long slender handles and chop sticks of brass, silver or bamboo are used in eating the food which consists of rice, vegetables, fish and occasionally a little meat. The house is heated by the hot air and smoke which passes through flues built under the floors. This heated air comes from the fireplace in the kitchen. Since one sleeps on the floor spread with padded mats, this system of heating is very comfortable indeed. Or to come in on a cold winter day and feel the warmth penetrating stockinged feet (one must take off one's shoes before entering) is a delightful sensation. In exceptionally cold weather a brass or earthern brazier filled with glowing coals is brought into the rooms. These braziers are wonderful for broiling meats.

In the courtyard there is a vegetable garden bordered with flowers such as dahlias, sunflowers, asters and chrysanthemums. Caring for the garden is the woman's task. She does not go out into the fields to toil. Her tasks are concerned with the daily household duties of preparing the food, laundering, sewing and rearing the children.

Religion

Since Ancestor-worship is an integral part of our religion, it is important that the family have many sons. The eldest son and his wife and children live with his family. When the father dies, the son becomes the head of the family and must faithfully perform his filial duty of respect in ceremonials on days set aside for this purpose. Each family has its own burial ground which is usually on some hill that has been in the family's possession for many generations.

Besides Ancestor-worship, there is also the Buddhist religion which was brought from India by way of China. The Buddhist temples are built in secluded picturesque spots in the mountains. Many Korean men become monks and go to spend their days in these temples because they wish to escape from the cares and worries of living in a materialistic world. Second only to Buddhism is a religion of purely Korean origin, called Chun-Do-Kyo. It is financed in a very effective manner, and constitutes the second richest religious sect in Korea. Each member sets aside a spoonful of uncooked rice from one meal a day. This is collected and sent either in the actual product or its equivalent in money to headquarters. Tho a spoonful of rice each day from each member is small in itself, when one considers the total amount collected from about three million members, it is very great. With this income, schools and churches are built, educational magazines and various other projects for the benefit of the general public are carried on. The spirit advocated by the sect is equality and love, in the strictest democratic sense of those words.

The School

After returning to the street, we soon pass an old-fashioned school, called "Suh-tang," from which the chanting sound of the boys (girls are not allowed to attend) reading their lesson in unison, floats out to us. Can you imagine the master sitting in the center of the floor with a dignified manner, and his pupils likewise sitting on the floor around him? The master must always be regarded with the greatest respect by the students. The subject studied is the Chinese classics. These classics include rudiments of mathematics and the sciences, but philosophy predominates. Modern schools have been established only in the large villages. The students of these schools wear uniforms of dark material, and are taught all the mod-

ern subjects, including physical education and in some schools even vocational arts.

Marriage

A little farther on, we pass a wedding procession. The bride is riding in a closed sedan chair while the groom is riding on a donkey. Marriage in Korea takes place between a bride and groom who have not had a glimpse of each other up to the time of the ceremony. In fact, one might say until long after the ceremony, because both parties, being shy and self-conscious, would not dare even to take a peek at the other until they are alone. All the arrangements for the marriage are made between the matchmaker and the parents of both bride and groom. The matchmaker is usually a friend of both families. Neither the boy nor the girl has anything to say about the choosing of his mate. After the ceremony, the bride is taken to her husband's home. Considering how these marriages are arranged, it is surprising how large a percentage of them turn out quite happily. Altho at the present time, divorce is more or less reluctantly accepted by society, to obtain a divorce seventeen or eighteen years ago would have been almost a national problem. It was simply unheard of!

Agriculture

At the break of dawn, we can see the farmers starting out for their fields, carrying their implements on their shoulders. The old custom of building the dwellings in a group rather than separately on each farm, probably arose from the necessity for protection against bandits. Proximity to streams and shelter from climatic forces may also have something to do with this custom. Living thus in villages, the farmer perforce must walk daily a distance that varies from a quarter of a mile to two or three miles depending on how fortunate he is in getting a field near the village. Tenant farmers are in the majority. The field is farmed on a share basis, the share being about fifty per cent. Millet and barley are planted on the slopes and poorer soils. However in recent years there has been a tendency to plant tree crops such as mulberry or fruit trees. Paddy-fields occupy the lower lands. Altho the farmer does some irrigating of the crops, by man-power, he is largely dependent on rainfall which luckily has a summer maximum, thus coming at a time when it will benefit the growing plants the most. Since Korea is quite mountainous with no broad level plains to speak of, farming must necessarily be undertaken on a small scale, requiring much

hand labor. The use of modern machinery would be impractical.

Strong coöperative spirit among the villagers is demonstrated by the forming of associations, the members of which go together to each other's fields to help sow or harvest when time is pressing. The only stipulation is that the members working in the field be adequately fed by the owner and that he in turn will work willingly when some other member is in need of help.

In the rainy season and during the winter, the farmer does odd jobs such as gathering fuel from the wooded hillsides or weaving baskets, mats or sandals. Such woven articles are taken to market along with other products which the farmer may have for sale.

Market Day

If we visit our Korean village on market day, we are impressed by the noise, the crowds, and the open display of the various products on the side of the street. There is a section where only animals are sold, a section for grains, one for cloth, etc. The loud bickerings in the attempt to strike a good bargain, the shouting by owners of their wares, interspersed with laughter and jokes, can be heard everywhere. Those attending these markets are mostly men as very few women come. Market day is held once every five days. Usually the smaller villages take their wares to the market held in a nearby larger village. One may purchase everything that is needed: oxen, chickens, eggs, dried fish, persimmons, rice, vegetables, lumber or cloth.

Other Occupations

Continuing our stroll down the village street, we pass a blacksmith shop, wineshops, food shops, tailors' establishments, carpenters' shops, a small paper-making industry, and general stores where everything is sold from farm tools to candy.

From the street we can hear the strains of Korean music coming from some building which perhaps is an inn. We can hear clearly the tones of the different musical instruments such as the harp, the bamboo flute, drum, clarionet, and bugle.

Laundering

As we reach the outskirts of the village we pass a stream where we see a bevy of women washing clothes. They laugh and chatter as they pound the clothes on smooth rocks with wooden paddles. Later when the clothes are dry enough to be ironed, they will be

pounded again with wooden clubs until the material is smooth and lustrous. Winter clothing must be taken apart before laundering, the padding of cotton taken out, and when the material has been washed and ironed, the padding is put in again and the whole garment sewed together. Such tasks take up a large part of a woman's time.

Conclusion

It is dusk as I turn my footsteps back toward the center of the village. The street is less crowded and less noisy. Most of the villagers are in their homes eating supper. Down the street a postman trudges to his horse or it may be to a bicycle which he rides to the nearby large village. He comes only once in three days. As he fades from view, the picture of that Korean village fades also. I wonder if that village will be the same when I return to Korea? Perhaps the postman will come to deliver and gather mail every day instead of once in three days. Perhaps the streets will be paved. Perhaps every male, including grandfather, will have cut off his hair and discarded his tall horsehair hat. Perhaps the girls are less restricted than they used to be and may go along the streets with more freedom. There may even be motor cars honking incessantly for a right of way! I can hardly wait to see that homeland again. I am sure that tho there may have been changes, I shall recognize my own childhood village.

AN EXPERIMENT IN TEACHING CURRENT GEOGRAPHY

FRANCES C. REPASS
Spearfish, South Dakota

THE PROBLEM

The teaching of social studies using a course of study including history, civics, geography, science, and hygiene in the elementary and upper grades has resulted in a surprising deficiency in the knowledge of place geography. Many high and junior high school students have no idea of the location of places mentioned in the current events papers or in their text books. An increasing awareness of this deficiency grew upon me each year I used the social studies course and I tried stressing place geography in the study of places prescribed in our course. The results were not gratifying and high school teachers were still complaining about the lack of geographic knowledge. Then I decided to supplement the social studies course with a course in geography.

Since the pupil's contact with place geography comes largely thru their reading of current events, I decided to have them study the places mentioned in the news. Two divisions of approximately twenty-five seventh grade pupils spent a half hour each day for the entire school year studying these places.

PROCEDURE

The children were provided with sets of maps consisting of one world map and a map of each continent. They were pleased to acquire this new property and to know what we were going to do. I asked them what plan we should follow and they suggested making a list of all places in the news, locating these places, and studying the ones about which there was most news. That plan was followed and the first individual lists were made. Truly they were "wonderfully and fearfully made," too. In addition to the names of actual places, i.e., countries, cities, continents, oceans, and seas we had the following:

English	bay	Loyalist	Stalin
Germany's	rivers	French	Mussolini
Nobel Prize	village	Columbia University	
Southern states	Nazi Party		
Duke of Kent	steamer	Cordell Hull	

I admit I was a bit nonplussed by these lists. The lack of knowledge was more suprizing than I had imagined in my wildest guesses.

Our first lesson was one in English rather than in geography but we finally had a composite list of bona fide places in the news and we proceeded to locate them on the maps of the various continents. The world map was reserved for locating places about which we had studied after we had read the news and located them.

The location proved to be a difficult matter, too, for the majority of the class knew little or nothing about using maps indexed in atlas style. Some actually thought they had to look at each map in the geography. It is my sincere belief that authors of geographies are at fault here for most of them fill their texts with perfectly delightful maps but do not index them. Naturally the child has no guides to give a hint as to even the approximate location. Children learn to use indexed maps very easily and should be given these time savers early in the study of geography. Then the matter of indicating dots, stars, etc., for cities; broken lines for boundaries; and blue lines for rivers was not understood and had to be clarified. Thus, our second lesson was on the interpreting of maps.

Now one lesson on each of the above, did not clear up all the difficulties for all time. "Cordell Hull, Mussolini, Nazi, French, Germany" appeared again and again in subsequent lists for the entire first semester and in the eighth month "Mussolini" cropped up again. Likewise, the use of the indexed map was not practised by all children for they reverted to the old way of "looking at the map" as they called it.

Naturally the first location lessons took much more time than later ones because the children were less adept in using maps and because the later lists were shorter since the same places were frequently mentioned in the news week after week.

After all places had been put on the maps each week we decided upon the place or places about which there was most news and began to glean information from all sources at our command. Reports were given and discussions were held. The news story itself frequently told some historic facts about the place and we investigated those and followed other leads in addition to getting geographic facts about each place. An understanding of why the place made news was gained. For instance, the children undestand that because Poland is not protected by natural barriers and because it has desirable resources it feels it must prepare for war. They appre-

ciated Belgium's attempts at armed neutrality and began to realize how the struggle between two factions in Spain affect all Europe. But emphasis was placed on the location of these places and the juxtaposition of other places.

As I said before, the same places appeared in the news from time to time. This provided splendid opportunities for review. Frequently different cities in countries which we had studied were mentioned as when there arose the necessity of moving the seat of the Spanish government from Madrid to Barcelona or to Valencia. Altho we had learned about these places in our study of Spain, the children were more interested in the location and relative advantages of each over Madrid when the suggested move was made.

We found that the half hour allotted to our study was a very short time but the children did not stop studying at the end of the period. We could not find some places in the atlases and geographies we had at school so the pupils continued the search at home and all places were found eventually.

Results

The results were gratifying. The children liked to use the maps, and most of them took pride in keeping them neat. They were interested in seeing the world map become our "known world" as each place studied was located there. They became more skillful in using all their materials, their vocabularies increased, as did their fund of geographical knowledge and their understanding of world problems became more comprehensive.

Justification

Now perhaps these results might have come from any other approach to the subject so I offer these points in theoretical justification of the course. In the first place, it is interesting and challenging for we study now the thing which is of interest now. I doubt if there be few people in the United States who do not know more about the Ohio-Mississippi River valley now than they have ever known because of the gripping news of the flood disaster last winter. They learned and will retain information about the place because it was of immediate and vital interest. The same thing is true of our study of "Current Geography." Then, too, the fact that all places studied are in the news of the world and are of immediate interest and concern to all people holds the course together and unifies it. We are not just inanely going thru a book nor are we

jumping from one corner of the world to another aimlessly.

In the next place there is a definite need for place geography. It is all very well to study regional and physical geography, the cold countries, the hot countries, the cotton belt, the wheat raising belt, etc., but the world designates these as countries, states, or provinces and not as regions and we need to know these political divisions if we are to visualize the relative position of places talked or written about. In our effort to emphasize the social and economic influences of physical geography we seem to have overlooked the fact that after all the very lives and destinies of people are controlled by political divisions now more than at any time in history.

This course enables children to become aware of the changing geography, such as the change of names of Iran for Persia and Ethiopia for Abyssinia. These changes could not be noted if we studied texts alone. Pupils are made conscious of differences in spelling of the same place as "Libia" and "Libya" and the preferred spelling such as "Yujoslavia" not "Jugoslavia." They learn of places not given in geographies as Lae in New Guinea, Kingsman Reef and other landing places for aircraft. This makes our course a changing, growing one, as courses of study should be.

Then lastly, there is one perfectly selfish point. This course keeps "teacher" from getting into too much of a rut for she, too, has to make lists, locate places, find new places and try to keep up-to-date.

ANNUAL MEETING NATIONAL COUNCIL OF GEOGRAPHY TEACHERS

The next meeting of the National Council will be at the University of Michigan, December 27 and 28, 1937. Headquarters will be in the Michigan Union, where all meetings will be held unless otherwise announced. Rooms are available for $2.00 and $3.00 per day single, and for $4.00, $5.00, and $6.00 per day double. Make reservations by writing Mr. S. G. Walz, Manager, Michigan Union, Ann Arbor, Michigan.

All persons interested in geographic education are cordially invited to attend the meetings. This is your opportunity to become acquainted with co-workers in the geographic education field. The following program is tentative. The final program will be available at the time of the first meeting, December 27.

TENTATIVE PROGRAM

Monday, December 27, 10:00 A.M.

Greetings:

Response:

Geography in Education

The Goals of Education and Implications for Teachers of Geography: Dean J. B. Edmonson, School of Education, University of Michigan.

A Philosophy of Geography for the Schools of American Democracy: Roderick Peattie, Ohio State University, Columbus, Ohio.

Monday, December 27, 2:00 P.M.

Researches Needed in the Teaching of College Geography:

Problems in Teachers Colleges: H. O. Lathrop, State Normal University, Normal, Ill.

Problems in Colleges of Arts and Sciences: Henry F. Becker, Florida State College for Women, Tallahassee, Fla.

Problems in Colleges and Schools of Business: A. J. Wright, Ohio State University, Columbus, Ohio.

Monday, December 27, 8:00 P.M.

Geographic Planning in the Pacific Northwest: O. W. Freeman, Eastern College of Education, Cheney, Wash.

Directors' Meeting

Tuesday, December 28, 9:00 A.M.

Researches Needed in the Teaching of High School Geography:

Commercial and Industrial Phases: Thomas Barton, Southern Illinois State Normal University, Carbondale, Ill.

Geography in the Social Studies: Frank E. Sorenson, University of Nebraska, Lincoln, Neb.

Physical and Political Phases: David J. Schwartz, Haaren High School, New York, N.Y.

Tuesday, December 28, 2:00 P.M.

Researches Needed in the Teaching of Elementary Geography:

Problems in Visual Instruction: W. M. Gregory, Educational Museum, Cleveland, Ohio.

Problems in the Elementary School: F. E. Lord, Michigan Normal College, Ypsilanti, Mich.

Tuesday, December 28, 6:30 P.M.

Annual Dinner

Geographic Problems in the Far East: J. E. Orchard, School of Business, Columbia University, New York, N.Y.

Directors' Meeting

THE DETROIT MEETING OF THE NATIONAL COUNCIL OF GEOGRAPHY TEACHERS IN COOPERATION WITH THE NATIONAL EDUCATION ASSOCIATION

More than 250 teachers and others interested in geography and geographic education attended the geography sessions of the National Education Association's seventy-fifth annual convention in Detroit, June 28 and 29 and July 1, 1937.

On Monday, June 28, the session was a joint meeting with the Department of Secondary Education of the N.E.A. Archie Gilpin of Detroit presided. Dr. E. E. Lackey, President of our National Council read a paper on "Geography as Related to Secondary Education." Then "Extra Curriculum Activities in Secondary School Geography" was the theme considered in a panel discussion. Major emphasis was placed on the value of field trips and travel clubs. Specific experiences with worthwhile trips and indoor club activities with both junior and senior high school pupils were related in detail.

Listening to and analyzing radio talks, preparing travel and geographical leaflets, planning brief holiday and longer vacation activities, supplementing musical programs with geographical interpretations, creating and presenting activities typical of festivals in other lands were mentioned, but discussion thereof had to be deferred because of insufficient time.

Dr. W. E. M. Aitken, Master, Normal School, Toronto, Canada; Jehiel S. Davis, High School, Van Nuys, California; Edna E. Eisen, State Teachers College, Kent, Ohio; Erma B. Hodgson, Junior College, Bay City, Michigan; R. J. Kehoe, Harper High School, Chicago, Illinois; Zoe A. Thralls, University of Pittsburgh; and Erna Grassmuck Gilland, Consultant in Geographic Education, California, Pennsylvania, as leader, were the participants in this panel.

At the Tuesday, June 29, session Dr. E. E. Lackey presided, and at the Thursday, July 1, session Vivienne S. Worley of the Denver Colorado Public Schools acted as Chairman.

Due to the untiring efforts and enthusiasm of Dr. Bert Hudgins, Wayne University, Detroit, a geography study trip to the Ford factory was made possible for a group of interested teachers.

Speaking from a wealth of experience in conducting tours, Jehiel S. Davis of Van Nuys, California gave helpful suggestions for "Traveling in Europe with Geographic Eyes." He used very attractive pictures from his extensive collection.

Under the thoughtful and competent leadership of Edith P. Parker, University of Chicago, "Essentials in Modern Geographic Education" were analyzed in panel discussion to which also Dr. W. E. M. Aitken of Toronto, Canada, Alice Camerer, Wayne University, Detroit, and R. J. Kehoe, Chicago, Illinois, contributed. The group agreed that the four most essential points in geography teaching are: (1) Giving the pupils a functioning knowledge of the subject, so that they understand its relation to their own and other peoples' living. (2) Requiring the pupils to do more thinking about physical changes in the earth and their relation to geographic facts. (3) Expecting geographic reasons why people in certain parts of the earth eat certain food, live in the kind of houses they do, and work as they do. (4) Teaching pupils to think independently.

Pearl H. Middlebrook, Geography Specialist for Silver Burdett and Co. very effectively pointed out "The Place of Geography in American Cultural Life." She indicated the needs for geographic facts in order to evaluate current events like the Italian-Ethiopian problem, the Arctic development by the Soviet Union and the possibility of another canal from the Caribbean to the Pacific Ocean. She urged that the traveler "see into" rather than merely "look at" the realities presented by the passing landscape. Moreover, when geography is studied in its relation to living, its knowledge increases one's appreciation of literature.

In presenting a delightful review of the "Geography of Current Developments in Palestine," Katheryne Thomas Whittemore, State Teachers College, Buffalo, New York, used beautiful pictures. She analyzed the industrial and other phases of living there.

L. C. Davis of State Teachers College, Indiana, Pennsylvania explained in clear-cut fashion the methods and results of field work carried on by students at that College.

How essential maps and globes are both in homes and schools was demonstrated by Zoe A. Thralls, Pittsburgh, Pennsylvania. Her definiteness added to the practical value of her paper on "Maps and Globes for School and Home."

In considering "Living in the Forest," W. P. Beard, Education Specialist, Forest Service, United States Department of Agriculture, indicated man's relation to the forest. He explained how the uses of forests have changed and so also has man's viewpoint towards forests.

"The National Significance of Soil Conservation and the Geographer's Responsibility" was clearly presented by Dr. Helen M. Strong, Educational Relations, United States Soil Conservation Service. She showed how "the scope of the geographers' investigations includes many of the same prin ,les and problems as those involved in establishing soil conserving practice." An analysis of Soil Erosion in the United States and a consideration of the scientific contributions of the United States Department of Agriculture to conservation followed. Her concluding thought was "geography presents a unique opportunity to develop an intelligent national consciousness not only as to soil conservation but in the whole broad field covering a national policy for wise land use."

ERNA GRASSMUCK GILLAND

EDITORIAL NOTES AND NEWS

The building and marking of the Pacific Crest Trail System which is to stretch from Canada to Mexico is showing marked progress, according to the United States Forest Service. The trail will average more than a mile above sea level and traverses 19 national forests, 5 national parks, and skirts about 75 well-known mountain peaks. Hikers, as well as mounted parties in summer, may tread great forests of fir, cedar, and pine, and by short side trips enter the redwoods. Others may digress from the trail to visit glaciers and scale our highest and most challenging mountain peaks, or descend into the depths of Death Valley. Prospective hikers have no difficulty in reaching the Trail as it is crossed by all our main transcontinental railroads and highways, as well as the Columbia River.

This trail is the counterpart of the famous Appalachian Trail whose terminals are Katahden, Me., and Mt. Oglethorpe, Ga. This 2,050 mile footpath has been completed, marked and measured except for 75 miles in Maine and 40 miles in the Great Smokies where the National Park Service is now building a new trail. Its altitude ranges from slightly above sea level at the Hudson River crossing to more than six thousand feet at Clingman's Dome in the Smokies. At the outset the Appalachian Trail incorporated the existing trail systems of New England and New York, but interested individuals have promoted the trail along with the active hiking clubs. Four guidebooks have been issued covering the trail and the fifth awaits the completion of the Smokies section. In many sections closed or open shelters are available at intervals of a moderate day's journey, say ten miles, particularly true in Maine, New Hampshire, Vermont, and parts of Virginia. Public accommodations are available along many parts of the trail. Some of the route traversed is utter wilderness, past lake and stream and waterfall, over forested hills and mountain crests, crossing intervening plateaus and valleys, with changing zones of birds and other types of animal and plant life. Both trails are not only the background or guide for the nature lover, but sufficiently detached for relief from the pressure and din of our modern economic life.

Dr. Howard H. Martin reports that the third summer meeting of the Association of Pacific Coast Geographers was held in Denver, Colorado, June 23-25, in conjunction with the Centennial meeting of the American Association for the Advancement of Science. The local committee in charge of the three day program consisted of Harold Hoffmeister, University of Colorado, chairman; Margaret Fuller Boos, University of Denver; and Walter Kirkendall, University of Colorado. About thirty geographers and numerous visitors were in attendance during the meetings and twenty-two papers were presented in two morning and one afternoon sessions.

The Wednesday forenoon program was largely devoted to papers on the Rocky Mountain area. The noon luncheon meeting at the Savoy Hotel was featured by an address given by E. Earl Lackey, President of the National Council of Geography Teachers. A short afternoon session was followed by a field excursion around the city of Denver, led by Margaret Fuller Boos.

The Thursday forenoon program included a number of papers on the geography of the Great Plains. Dr. Lackey also gave a demonstration of his map projectoscope. At the Thursday luncheon the retiring president of the Association, Howard H. Martin of the University of Washington, gave an illustrated address on "Colonization and Exploitation in Northern Japan." In the afternoon the geographers joined with a number of other societies in attending the special symposium on soil erosion.

Friday was devoted to a field trip in the Colorado Rockies adjacent to Denver. It was featured by a discussion of the physiography of the Front Range and included visits

to mines, milling plants and mining towns in the Idaho Springs and Central City area. Twenty-five geographers made the all-day trip under the leadership of Harold Hoffmeister.

Abstracts of the papers presented, including several papers in full will be available to Association members in the Yearbook to be published in the autumn.

Most of the western geographers find it physically and financially difficult, if not impossible, to attend geography meetings in the East during the brief Christmas holidays. Consequently the new Pacific association with its policy of a summer meeting, usually in conjunction with the Pacific division of the American Association for the Advancement of Science, is filling a very definite need for the geographers of the far West. The secretary's report shows the Association ending the year with an active membership of more than eighty.

Officers of the A.P.C.G. elected for 1937-38 are: President, George W. McBride, University of California at Los Angeles; Vice-President, John Leighly, University of California; Secretary-treasurer, Hallock F. Raup, University of California at Los Angeles; and Editor of the Yearbook, Otis W. Freeman, Eastern Washington College of Education, Cheney. The 1938 meeting will be held in California next June; geographers likely to be in attendance are requested to communicate with the secretary.

The Congrès International De Géographie will be held next summer in Amsterdam, July 18-28. A number of excursions have been planned to precede and follow the sessions, including one to Netherlands Indies.

The Second National Conference on Educational Broadcasting will be held at the Drake Hotel, Chicago, November 29, 30, and December 1, 1937.

A new magazine, *Le Risque,* dedicated to those young enough in spirit to undertake flights and voyages off the beaten paths into the unknown, was launched this summer at Paris, 20, rue Delambre.

A new map of the Pavlof district, Alaska, has recently been reissued by the Geological Survey, prepared in coöperation with the National Geographic Society. The area is of special interest since Mount Pavlof, on July 25, showered the land and sea for a distance of fifty miles, with a thin layer of volcanic ash. The Pavlof district is sparsely populated, but its deep harbors are frequented by fishing fleets after cod and salmon and by the yachts of big game hunters.

According to a recent release from the Department of Agriculture, in some arid regions where pumping water for irrigation has made heavy drafts on underground supplies, the water level has dropped so low that the cost of pumping has become burdensome to farmers. To check this trend, the Bureau of Agricultural Engineering has a number of projects for spreading flood waters over porous soils to help raise the ground water table. An illustration is afforded in the Santa Clara Valley, where the water plane has been lowered more than 100 feet in the last 15 years. Two years ago this district built six detention reservoirs to hold back flood waters so that they may seep underground. The rise in the wells averages about 28 feet.

The 1937 Yearbook of the United States Department of Agriculture, recently off the press, completes the report of the committee on genetics appointed in 1933 by Secretary Wallace. The first report made up the 1936 Yearbook, dealing chiefly with a national as well as international survey of practical breeding and genetic research with the major crop animals and classes of livestock. The present volume covers a varied field, such as garden vegetables, northern tree and bush fruits, citrus fruits, flowers, nut and forest trees, forage grasses, goats, turkeys, ducks, dogs and honeybees. The 1938 Yearbook will deal with soils and the 1939 Yearbook with animal and human nutrition.

In order to help protect the United States from yellow fever all of the flying staff on two airlines between the United States and South America is being vaccinated as rapidly as possible. The anti-yellow fever vaccine is being supplied by the Rockefeller Foundation of New York in cooperation with the laboratory of the Rockefeller Institute of Medical Research in Rio de Janiero. This is in accord with an agreement between the Pan American Sanitary Bureau in Washington, D.C., and the Pan American Airways, Inc., and the Pan American Grace Airways, Inc. Another agreement provides for fumigation of the plane prior to embarkation, and for the filing of a certificate of origin by each passenger embarking at any point north of 30° S. This certificate tells where each passenger has been six days prior to embarkation. Quarantine officers can thus detain a passenger who on arrival is less than six days away from yellow fever regions and hold him under observation until the fever has had time to develop. Similar agreements are expected to be made between the Sanitary Bureau and other international airlines in the western hemisphere.

Soil and Water Conservation in the Northern Great Plains is the title of one of the simplest explained and best illustrated bulletins of the Soil Conservation Service, Region Nine, 1937, United States Department of Agriculture. Each of the seventeen pages has a half page photograph and a narrative description bearing on the photograph, illustrative of the abuses from overgrazing, sod-breaking, faulty plowing, grass and straw burnings, and conservation farming practices by which the devastation may be checked. The pamphlet may be secured at a small price from the Superintendent of Documents, Wsahington, D.C.

Treasure Island, the man-made island reached by causeway from the San Francisco-Oakland Bridge, of which mention was made in the February, 1937, JOURNAL, is about completed. This island was built on a shoal in San Francisco Bay by pumping sand into a seawall enclosure about a mile square. As this island is to be the site of the 1939 Golden Gate International Exposition, no landscaping of grounds can take place until the salt has been leached from the sands. This will be accomplished by soaking the ground with fresh water and then draining off the salt water.

New methods of producing high quality grapefruit juice that will keep its flavor, at least for two years, have made possible the use of off-size and blemished fruit which formerly was largely a loss since it could not compete with the best grades on the fresh fruit market. Thus Texas canners specializing in grapefruit juice have developed a close-to-million dollar industry within the past four years and indications point to further gains.

GEOGRAPHICAL PUBLICATIONS

Harlan H. Barrows and Edith P. Parker. **United States and Canada.** 296 pp., 323 maps and illustrations. $1.44. **Journeys in Distant Lands.** 166 pp., 189 maps and illustrations. $.96. **Europe and Asia.** 280 pp., 255 maps and illustrations. $1.44. Silver Burdett and Co., New York, 1936.

The 1936 edition of the Barrows and Parker geography series improves somewhat the edition of 1927. The statistical material is brought up to date; the new large cities and some of the new railroads are noted on the maps; and the Soviet Union and Manchukuo are given brief but adequate treatment in new units. There are some omissions. The Hankow-Canton railroad is shown as uncompleted altho it was opened for traffic in 1936. The statistical material for all grafs is undated, and the note on the table on page 270 in "Europe and Asia" states that the figures are estimates for some countries but fails to indicate which are the estimates.

The appearance of the books has been improved by using attractively colored covers and darker type. The pictures are easier to read than those in the older edition not only because of the stronger contrasts in light and shade but also because in some of them relationships are shown more clearly.

Some of the study difficulties in the first book have been removed by the use of shorter sentences; by diacritical marking of unusual words; by careful development of new words as they are needed; and by unifying the separate episodes in the story which such devices as "Pretend you hear a man on your steamer telling the story called 'Another kind of Boat.'" (Page 4)

Changing conditions are not sufficiently considered. The importance of cotton manufacturing in the South as contrasted with New England and the use of the all-water route for raw silk from Japan to our eastern cities are cases in point. On the whole, however, the revision has bettered an excellent first edition.

Eva M. Wilson

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Ypsilanti, Michigan

Lester E. Klemm, Otis P. Starkey, and Norman F. Hall. **Introductory Economic Geography.** 492 pp. (8½ x 11), 19 plates, 326 illustrations. Harcourt, Brace and Company, New York, 1937. $4.00.

As the authors explain *"Introductory Economic Geography* is designed to furnish the text basis of a college course in economic geography that may not require any college prerequisites."

With the Introductory as Part I, the text contains five parts.

Part II, The Physical Environment, seven chapters (73 pp.), discusses briefly primary physical features. This part provides the student with the physical basis on which he later builds economic facts, concepts and interpretations.

Part III, Foods, Raw Materials, and Fuels, seventeen chapters (164 pp.), touches upon the principal articles of commerce as to their distribution of production and consumption.

Part IV, Commerce and Manufacturing, five chapters (40 pp.), "analyzes the geographic basis of commerce, and the cities and manufacturing that are so intimately related to commerce."

Part V, Regional Geography, sixteen chapters (173 pp.), analyzes world-wide economic geography by regions (usually political countries) and their subdivisions. This part treats economic conditions by regions in detail, integrates the materials previously studied, and by recapitulation emphasizes important points.

The book will stir much interest among teachers and geographers. Some will commend the unusual amount of historical and anthropological material found in it (from this angle it should make a good social science text); others will disagree with the authors in regard to the geographic environment being only physical; students will welcome and benefit by the philosophical treatment of subject matter; and some teachers may lament the better development of agriculture over that of manufacturing and the lack of the over-grown place-name method.

Maps, diagrams, and pictures are excellent. The half-tone plates should stimulate interest both in the book and the geographic relationships they illustrate.

Undoubtedly, *Introductory Economic Geography* is a distinct and valuable contribution to the field of economic geography. An honest attempt to select the best text for an introductory economic geography course commands the examination of this book.

THOMAS F. BARTON

Southern Illinois State Normal University

Howard Ruede. **Sod-House Days, Letters from a Kansas Homesteader, 1877-78.** Edited by John Ise. XII + 248 pages, $2.75. Columbia University Press, 2960 Broadway, New York City.

Pioneering loses some of the glamour which the average American is so prone to attach to it when viewed thru the eyes of one who himself broke the sod. Not that Mr. Ruede, whose letters comprise this volume, was soured on the life of homesteading which he had selected. Rather, in his efforts to picture conditions to the folks back East who planned to join him later, he revealed frontier life as they might expect to find it. When his story is read in this twentieth century the life of the pioneer seems drab, tedious, and physically hard.

Mr. Ruede homesteaded in central Kansas. His letters cover a period extending from spring of 1877, when he left Pennsylvania, to fall of 1878 when he was joined by the rest of his family in Kansas. His diary-like account is matter-of-fact and unembellished. The reader is given a picture of western Kansas as it appeared before the onward march of the agricultural frontier, and is led thru selection of homestead site, construction of sod-house, and other steps by which the pioneer gradually changed this open prairie country into settled area.

Here is a volume that distinctly satisfies the need of one who is seeking a faithful portrayal of pioneering conditions in a portion of our last agricultural frontier. Mr. Ise in finding and editing these letters has rendered the student of American agricultural history a distinct service.

THEODORE L. NYDAHL

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Mankato, Minn.

The JOURNAL *of* GEOGRAPHY

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The Wine Valley of North Portugal. By Edward A. Ackerman ... 333

During the past four years Mr. Ackerman has spent twenty-one months in field studies in western Europe. He spent the winter of 1935, and the summer of 1936 in Portugal. During the past summer he traveled in the Balkans.

The next article in our series on Europe will present an interesting discussion of the Malaga raisin district of Spain. It has been prepared by Alice Foster of the University of Chicago.

An Approach to Map Study. By Elizabeth Dudley 354

Miss Dudley is a third grade teacher in the training school of the Milwaukee State Teachers College. She contributed Child Life in Third Grade, *Childhood Education,* April, 1937.

A Hundred Years Ago 356

Conservation in Utah, A Semi-Arid Region. By Norah E. Zink 357

Dr. Zink is a professor of geography in the State Teachers College at Indiana, Pennsylvania. After completing her undergraduate studies at the University of Utah and Columbia University, she served in the State Engineer's Office in Salt Lake City, where she was intimately associated with the problems of conservation.

This is the fourth in a series of articles dealing with conservation which have appeared in the JOURNAL. Another will be published shortly.

An Effective Problem Method. By William Kesselman 369

Mr. Kesselman is a teacher of geography in the Oklahoma Avenue School, Milwaukee, Wisconsin. He invites correspondence on the method suggested.

What Is It? By Margaret Raymond 373

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